

WHAT IS CLAIMED AS THE INVENTION IS:

1. A foam dispenser for use with a container containing soap or other liquid comprising:

- 5 a rotary soap pump having a soap inlet and a soap outlet wherein the inlet is operably connectable to the container;
- a rotary air pump having an air inlet and an air outlet;
- a mixing chamber in flow communication with the air outlet and the soap outlet, the mixing chamber having an outlet;
- 10 a porous membrane downstream of the mixing chamber, whereby an air and soap mixture that passes through the mixing chamber outlet passes through the porous membrane thereby producing foam; and
- a drive means operably connected to the rotary soap pump and the rotary air pump.

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2. A foam dispenser as claimed in claim 1 further including a one way valve positioned in the soap outlet.

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3. A foam dispenser as claimed in claim 2 further including a one way valve positioned in the air outlet.

4. A foam dispenser as claimed in claim 3 wherein the container is a collapsible

container and whereby the container collapses as liquid is pumped therefrom.

5. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump are each lobe pumps.

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6. A foam dispenser as claimed in claim 5 wherein each lobe pump has a pair of intermeshing tri-lobes.

7. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump are each vane pumps.

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8. A foam dispenser as claimed in claim 7 wherein each vane pump has a plurality of vanes spaced around a drive wheel.

9. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump are each gear pumps.

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10. A foam dispenser as claimed in claim 9 wherein each gear pump has a drive gear and a pump gear and wherein the drive gear is rotatable in the pump gear.

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11. A foam dispenser as claimed in claim 1 wherein the soap pump and the air pump are each peristaltic pumps.

12. A foam dispenser as claimed in claim 11 wherein each peristaltic pump has a flexible tube and a peristaltic drive wheel and the peristaltic drive wheel engages the flexible tube.

5 13. A rotary foam dispenser for producing and dispensing foam comprising:

a container for containing a liquid;

a rotary soap pump having a soap inlet and a soap outlet wherein the inlet is operably connectable to the container;

a rotary air pump having an air inlet and an air outlet;

10 a mixing chamber in flow communication with the air outlet and the soap outlet having an outlet;

a porous membrane downstream of the mixing chamber, whereby an air and soap mixture that passes through the mixing chamber outlet passes through the gauze thereby producing foam;

15 a drive means operably connected to the rotary soap pump and the rotary air pump; and

a housing having an interior and the container, the soap pump, the air pump, the mixing chamber are housed within the housing interior.

20 14. A rotary foam dispenser as claimed in claim 13 further including a one way valve positioned in the soap outlet.

15. A rotary foam dispenser as claimed in claim 14 further including a one way valve positioned in the air outlet.

16. A rotary foam dispenser as claimed in claim 15 wherein the container is a
5 collapsible container and whereby the container collapses as liquid is pumped therefrom.

17. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air pump are each lobe pumps.

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18. A rotary foam dispenser as claimed in claim 17 wherein each lobe pump has a pair of intermeshing tri-lobes.

19. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air
15 pump are each vane pumps.

20. A rotary foam dispenser as claimed in claim 20 wherein each vane pump has a plurality of vanes spaced around a drive wheel.

20 21. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air pump are each gear pumps.

22. A rotary foam dispenser as claimed in claim 21 wherein each gear pump has a drive gear and a pump gear and wherein the drive gear is rotatable in the pump gear.

23. A rotary foam dispenser as claimed in claim 13 wherein the soap pump and the air
5 pump are each peristaltic pumps.

24. A rotary foam dispenser as claimed in claim 23 wherein each peristaltic pump has a flexible tube and a peristaltic drive wheel and the peristaltic drive wheel engages the flexible tube.

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